

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A fuel cell that includes an electrolyte membrane having (a) a cathode and a gas diffusion layer arranged in the stated order on one surface of the electrolyte membrane, and (b) an anode and another gas diffusion layer arranged in the stated order on the other surface of the electrolyte membrane, wherein electricity is generated when an oxidizing gas is distributed along and passed through the cathode-side gas diffusion layer and a fuel gas is distributed along and passed through the anode-side gas diffusion layer,

the cathode-side gas diffusion layer comprising a first layer and a second layer, formed by adhering conductive particles to a fibrous base material, the formation of the first layer and second layer resulting in the formation of a plurality of pores throughout the first layer and second layer, with an active specific surface area of the conductive particles within the first layer being greater than an active specific surface area of the conductive particles within the second layer; wherein

the first layer is in contact with the cathode,

the second layer is thicker than the first layer, and

the second layer is the layer along which the oxidizing gas is distributed and through which the oxidizing gas is passed.

Claim 2 (Original): The fuel cell of Claim 1, wherein
the first layer and second layer of the cathode-side gas diffusion layer have a plurality of
pores, and
an average pore size of the second layer is greater than an average pore size of the first layer.

Claims 3-4 (Cancelled)

Claim 5 (Currently Amended): The fuel cell of Claim ~~[[3]]~~ 1, wherein
the fibrous porous base material is carbon paper and the conductive particles are carbon
particles.

Claim 6 (Original): The fuel cell of Claim 5, wherein
the carbon particles of the first layer are made of
(i) furnace black or
(ii) furnace black mixed with acetylene black, expanded graphite, fibrous graphite, or any
combination thereof, and the carbon particles of the second layer are made of
(i) acetylene black or
(ii) acetylene black mixed with furnace black.

U.S. Patent Application Serial No. 10/030,155
Reply to Office Action of **January 29, 2004**

Claim 7 (Currently Amended): The fuel cell of Claim [[6]] 5, wherein
the carbon particles of the first layer have an average specific surface area ranging from 100
 m^2/g to 1000 m^2/g inclusive, and
the carbon particles of the second layer have an average specific surface area of less than 100
 m^2/g .

Claim 8 (Original): The fuel cell of Claim 1, wherein
the cathode-side gas diffusion layer, made up of the first and second layers, has a water
retention capacity ranging from 0.5 mg/cm^2 to 1.5 mg/cm^2 inclusive, and water retention density
ranging from 0.05 g/cm^3 to 0.5 g/cm^3 inclusive.

Claims 9-10 (Cancelled)